(TERT) FNSC.

49. The method according to claim 45 wherein the NSC is capable of long term culture and is derived from a cellular composition prepared by a method comprising:

obtaining a source of neural stem cells;

preparing a suspension of cells from the source;

contacting the suspension of cells with a suitable medium to maintain the neural stem cells in a long term cell culture; and

culturing the cells in the long term culture, wherein said culturing comprises passaging and propagation of the cells.

50. The method according to claim 49 wherein the long term culture is a period of 4 to 6 weeks.

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51. The method according to claim 49 wherein the source of the neural stem cell is a fetus differentiated at a stage after the embryonic stage.

52. The method according to claim 51 wherein the source of the neural stem cell is a head or spinal cord of the fetus.

53. The method according to claim 49 wherein the suitable medium includes at least one lipid and at least one mitogenic factor.

54. The method according to claim 53 wherein the lipid is selected from the group consisting of cholesterol, triglycerides or phospholipids or a combination thereof.

55. The method according to claim 53 wherein the mitogenic factor is selected from the group consisting of bFGF, EGF, PDGF or a combination of EGF and bFGF.

56. The method according to claim 55 wherein the EGF is in the range of 2 to 20 ng/ml.

57. The method according to claim 55 wherein the bFGF is in the range of 2 to 20 μ/ml.

58. The method according to claim 53 wherein a chemically defined lipid concentrate is present

in a ratio of 1:100.

59. The method according to claim 53 wherein the media further includes a cell survival factor.

60. The method according to claim 59 wherein the cell survival factor is selected from the group consisting of transferrin, insulin, growth factors including EGF, bFGF (FGF-2) or PDGF, lipids and selenium.

61. The method according to claim 49 wherein the passaging and propagation of the cells is conducted when the cells bud from the cell culture.

62. The method according to claim 45 wherein the NSC is genetically modified and wherein the genetic modification comprises destroying, modifying or deleting a gene.

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63. A method of producing a genetically modified non-human animal said method comprising:

obtaining an embryo prepared by the method according to claim 45; and allowing the embryo to mature to the genetically modified non-human animal.

64. A method of producing a genetically modified non-human animal said method comprising:

obtaining an embryo prepared by the method according to claim 62; and allowing the embryo to mature to the genetically modified non-human animal.

65. A method of producing a cell line from an embryo to produce cloned cells of an embryo, said method comprising:

obtaining an embryo prepared by the method according to claim 45; culturing the embryo to an advanced cleavage stage embryo; and

separating and culturing the cleaved cells of the embryo.

66. A method of producing a cell line from an embryo to produce cloned cells of an embryo, said method comprising:

obtaining an embryo prepared by the method according to claim 62; culturing the